Hilary Snook
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OEME
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August 20, 2002

Dear Hilary;

This concerns Connecticut's ongoing participation in the Regional EMAP project. As you know, this project is providing CTDEP with resources to conduct a probabilistic survey of aquatic communities in wadeable streams in Connecticut as a measure of aquatic life use-support. Although this Department has been conducting biological monitoring for several decades, this is our first attempt to utilize a probabilistic design that will support assessment of all wadeable stream miles.

The State of Connecticut contains approximately 5,830 miles of rivers and streams, over 95% of these miles are considered wadeable. Due to resource constraints we have typically monitored less than 20% of the state's river miles for purposes of Clean Water Act reporting requirements under section 305(b) and 303(d). By necessity we prioritized our monitoring efforts to focus on legacy pollutants and waste-receiving streams, as well as a few major recreational rivers and reference sites. Most of this subset of streams tends to fall into the larger end of the scale in terms of magnitude and is biased toward sites with significant potential for impairment with a disproportionate influence from point sources.

The ongoing two-year REMAP project will enable us to conduct a comprehensive assessment of aquatic life use-support for all wadeable streams in Connecticut pursuant to our CWA obligations. The random nature of this sampling design should also provide a more balanced view of resident aquatic communities, and in fact, we have already observed water quality conditions outside of the normal range of observations typically encountered in our focused network. We were also fortunate in securing nutrient criteria funding to add a periphyton component to the suite of REMAP parameters. We are optimistic that analysis of the data generated by the two-year REMAP project will augment our existing database to facilitate development of numerical biological criteria and provide insight into relationships between land use and water chemistry relative to aquatic community structure.

Given the need to continue monitoring at traditional focused sites to monitor performance of waste treatment facilities, etc., we would not have had the opportunity to adopt a probabilistic approach without the assistance afforded by the REMAP project. We also see a future need to develop similar probabilistic efforts to other types of waters, mainly large rivers and lakes.

Yours truly,

Ernest J. Pizzuto Jr.
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